



PATENT  
Docket No. 246152019901

**CERTIFICATE OF MAILING BY "FIRST CLASS"**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:  
Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on December 16, 2003.

  
Michael Boyd

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In the application of:

Mieke SIBEIJN et al.

Serial No.: 10/029,316

Filing Date: December 20, 2001

For: ISOLATION OF CAROTENOID  
CRYSTALS FROM MICROBIAL  
BIOMASS

Examiner: F. Prats

Group Art Unit: 1651

**INFORMATION DISCLOSURE  
STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Copies of the documents were previously submitted in an Information Disclosure Statement and/or Office Action, directed to the related application Serial Number 09/402,604 filed 22 October 1999, and, accordingly, copies are not included herewith. This protocol conforms with 37 C.F.R. §1.98(d) and M.P.E.P. 609(A)(2). The Examiner is requested to make these documents of record in the application.

12/24/2003 YPOLITE1 00000053 031952 10029316  
01 FC:1806 180.00 DA

Serial No.10/029,316  
Docket No.246152019901

sd-172330

This Information Disclosure Statement is submitted:

- ☐ With the application; accordingly, no fee or separate requirements are required.
- ☐ Before the mailing of a first Office Action after the filing of a Request for Continued Examination under § 1.114.
- ☐ Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required.
- ☒ After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.
  - ☐ A fee is required. A check in the amount of \_\_\_ is enclosed.
  - ☒ A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.
  - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below; accordingly; no fee is believed to be due.
- ☐ After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
  - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below and a check in the amount of \_\_\_ is enclosed.
  - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below and a Fee Transmittal form (PTO/SB/17 is attached to this submission in duplicate.)


Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

The information contained in this Information Disclosure Statement under 37 C.F.R. § 1.97 and § 1.98 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal form is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing 246152019901. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: December 16, 2003

Respectfully submitted,

By:   
Karen R. Zachow, Ph.D.  
Reg. No. 46,332  
Morrison & Foerster LLP  
3811 Valley Centre Drive, Suite 500  
San Diego, California 92130-2332  
Telephone: (858) 720-5191  
Facsimile: (858) 720-5125

Form PTO-1449

Docket Number 246152019901

Application Number 10/029,316

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

Applicant

Mieke SIBEIJN et al.

Filing Date December 20, 2001

Group Art Unit 1651

Mailing Date December 16, 2003

## U.S. PATENT DOCUMENTS

| Examiner Initials | Ref. No. | Date    | Document No. | Name          | Class | Subclass | Filing Date If Appropriate |
|-------------------|----------|---------|--------------|---------------|-------|----------|----------------------------|
|                   | 1.       | 12/1965 | 3,226,302    | Ciegler       | 435   | 67       |                            |
|                   | 2.       | 08/1966 | 3,268,606    | Jaeger et al. | 435   | 67       |                            |
|                   | 3.       | 12/1967 | 3,356,753    | Sarnecki      | 435   | 67       |                            |
|                   | 4.       | 01/1970 | 3,492,202    | Bohinski      | 435   | 67       |                            |
|                   | 5.       | 01/1995 | 5,378,369    | Rose et al.   | 210   | 637      |                            |
|                   |          |         |              |               |       |          |                            |

## FOREIGN PATENTS

| Examiner Initials | Ref. No. | Date    | Document No. | Country       | Class | Subclass | Translation YES NO |
|-------------------|----------|---------|--------------|---------------|-------|----------|--------------------|
|                   | 6.       | 04/1967 | GB 1 064 645 | Great Britain |       |          |                    |
|                   | 7.       | 01/1998 | WO 98 03480  | PCT           |       |          |                    |
|                   |          |         |              |               |       |          |                    |

## OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

| Examiner Initials | Ref. No. | Title   |
|-------------------|----------|---|
|                   | 8.       | Database WPI, Section Ch, Week 9526, Derwent Publications Ltd., London, GB, Class B05, AN 95-194788, XP002043884.   |
|                   | 9.       | Gallik et al., <i>Isolation of Crystals from Phycomyces-Blakes Ecanus</i> , Biophys. Soc. Annu. Meet. Abstr. 14 (1970) 57A, XP002043881.                                |
|                   | 10.      | Kudinova et al., <i>Kinetics of Beta Carotene Accumulation During the Fermentation of Blakeslea-Trispora</i> , Biol. Abstr. 94 (1992) Abstract No. 130801, XP002076403. |
|                   | 11.      | Ootaki et al., <i>Octahedral Crystals in Phycomyces</i> , J. Cell. Biol. 57(2):278-88 (1973) XP002043880.   |
|                   | 12.      | Yuan et al., <i>Method for Separation of Natural Antitumor Cis- and Trans- Beta- Carotene Isomer</i> , Chem. Abstr. 120(22) (1994) Abstract No. 280268, XP002076404.    |
|                   |          |   |
|                   |          |   |

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.



Image

1651

PTO/SB/21 (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|   |                      |                        |              |
|---|----------------------|------------------------|--------------|
| <b>TRANSMITTAL FORM</b><br><br>(to be used for all correspondence after initial filing) | Application Number   | 10/029,316             |              |
|   | Filing Date          | December 20, 2001      |              |
|   | First Named Inventor | Mieke SIBEIJN          |              |
|   | Art Unit             | 1651                   |              |
|   | Examiner Name        | F. Prats               |              |
| Total Number of Pages in This Submission  | 9                    | Attorney Docket Number | 246152019901 |

**ENCLOSURES (Check all that apply)**

|   |   |  |
|---|---|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form<br><br><input type="checkbox"/> Fee Attached<br><br><input type="checkbox"/> Amendment/Reply<br><br><input type="checkbox"/> After Final<br><br><input type="checkbox"/> Affidavits/declaration(s)<br><br><input type="checkbox"/> Extension of Time Request<br><br><input type="checkbox"/> Express Abandonment Request<br><br><input checked="" type="checkbox"/> Information Disclosure Statement (3 pages)<br><br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><br><input type="checkbox"/> Response to Missing Parts/Incomplete Application<br><br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><br><input type="checkbox"/> Licensing-related Papers<br><br><input type="checkbox"/> Petition<br><br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><br><input checked="" type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address (2 pages)<br><br><input type="checkbox"/> Terminal Disclaimer<br><br><input type="checkbox"/> Request for Refund<br><br><input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance Communication to Group<br><br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><br><input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)<br><br><input type="checkbox"/> Proprietary Information<br><br><input type="checkbox"/> Status Letter<br><br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br>Form PTO-1449 (1 page)<br>Return postcard |
| <b>Remarks</b><br><br><b>Customer No. 25225</b>   |   |  |

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

|                         |  |
|-------------------------|--|
| Firm or Individual name | MORRISON & FOERSTER LLP<br>Karen R. Zachow, Ph.D. - 46,332 |
| Signature               | <i>Karen R. Zachow</i>                                     |
| Date                    | December 16, 2003  |

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: 12-16-03 Signature: *Michael Boyd* (Michael Boyd)

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**FEE TRANSMITTAL  
for FY 2004**

Effective 10/01/2003, Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27**TOTAL AMOUNT OF PAYMENT** (\$) **180.00****Complete if Known**

|                      |                   |
|----------------------|-------------------|
| Application Number   | 10/029,316        |
| Filing Date          | December 20, 2001 |
| First Named Inventor | Mieke SIBEIJN     |
| Examiner Name        | F. Prats          |
| Art Unit             | 1651              |
| Attorney Docket No.  | 246152019901      |

**METHOD OF PAYMENT (check all that apply)**☐ Check ☐ Credit Card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit  
Account  
Number

03-1952

Deposit  
Account  
Name

Morrison &amp; Foerster LLP

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee  
to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

| Large Entity |          | Small Entity |          | Fee Description        | Fee Paid |
|--------------|----------|--------------|----------|------------------------|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |                        |          |
| 1001         | 770      | 2001         | 385      | Utility filing fee     |          |
| 1002         | 340      | 2002         | 170      | Design filing fee      |          |
| 1003         | 530      | 2003         | 265      | Plant filing fee       |          |
| 1004         | 770      | 2004         | 385      | Reissue filing fee     |          |
| 1005         | 160      | 2005         | 80       | Provisional filing fee |          |

**SUBTOTAL (1)** (\$) **0.00****2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE**

| Total Claims       |         | Extra Claims |   | Fee from below |   | Fee Paid |  |
|--------------------|---------|--------------|---|----------------|---|----------|--|
|                    | -20** = |              | x |                | = |          |  |
| Independent Claims | -3** =  |              | x |                | = |          |  |
| Multiple Dependent |         |              |   |                | = |          |  |

| Large Entity |          | Small Entity |          | Fee Description  |
|--------------|----------|--------------|----------|--|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |
| 1202         | 18       | 2202         | 9        | Claims in excess of 20                                     |
| 1201         | 86       | 2201         | 43       | Independent claims in excess of 3                          |
| 1203         | 290      | 2203         | 145      | Multiple dependent claim, if not paid                      |
| 1204         | 86       | 2204         | 43       | ** Reissue independent claims over original patent         |
| 1205         | 18       | 2205         | 9        | ** Reissue claims in excess of 20 and over original patent |

**SUBTOTAL (2)** (\$) **0.00**

\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

| Large Entity |          | Small Entity |          | Fee Description  | Fee Paid |
|--------------|----------|--------------|----------|--|----------|
| Fee Code     | Fee (\$) | Fee Code     | Fee (\$) |  |          |
| 1051         | 130      | 2051         | 65       | Surcharge - late filing fee or oath  |          |
| 1052         | 50       | 2052         | 25       | Surcharge - late provisional filing fee or cover sheet                     |          |
| 1053         | 130      | 1053         | 130      | Non-English specification  |          |
| 1812         | 2,520    | 1812         | 2,520    | For filing a request for <i>ex parte</i> reexamination                     |          |
| 1804         | 920*     | 1804         | 920*     | Requesting publication of SIR prior to Examiner action                     |          |
| 1805         | 1,840*   | 1805         | 1,840*   | Requesting publication of SIR after Examiner action                        |          |
| 1251         | 110      | 2251         | 55       | Extension for reply within first month                                     |          |
| 1252         | 420      | 2252         | 210      | Extension for reply within second month                                    |          |
| 1253         | 950      | 2253         | 475      | Extension for reply within third month                                     |          |
| 1254         | 1,480    | 2254         | 740      | Extension for reply within fourth month                                    |          |
| 1255         | 2,010    | 2255         | 1,005    | Extension for reply within fifth month                                     |          |
| 1401         | 330      | 2401         | 165      | Notice of Appeal   |          |
| 1402         | 330      | 2402         | 165      | Filing a brief in support of an appeal                                     |          |
| 1403         | 290      | 2403         | 145      | Request for oral hearing   |          |
| 1451         | 1,510    | 1451         | 1,510    | Petition to institute a public use proceeding                              |          |
| 1452         | 110      | 2452         | 55       | Petition to revive - unavoidable   |          |
| 1453         | 1,330    | 2453         | 665      | Petition to revive - unintentional   |          |
| 1501         | 1,330    | 2501         | 665      | Utility issue fee (or reissue)   |          |
| 1502         | 480      | 2502         | 240      | Design issue fee   |          |
| 1503         | 640      | 2503         | 320      | Plant issue fee  |          |
| 1460         | 130      | 1460         | 130      | Petitions to the Commissioner  |          |
| 1807         | 50       | 1807         | 50       | Processing fee under 37 CFR 1.17(q)  |          |
| 1806         | 180      | 1806         | 180      | Submission of Information Disclosure Stmt                                  | 180.00   |
| 8021         | 40       | 8021         | 40       | Recording each patent assignment per property (times number of properties) |          |
| 1809         | 770      | 2809         | 385      | Filing a submission after final rejection (37 CFR 1.129(a))                |          |
| 1810         | 770      | 2810         | 385      | For each additional invention to be examined (37 CFR 1.129(b))             |          |
| 1801         | 770      | 2801         | 385      | Request for Continued Examination (RCE)                                    |          |
| 1802         | 900      | 1802         | 900      | Request for expedited examination of a design application                  |          |

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3)** (\$) **180.00****SUBMITTED BY**

Name (Print/Type) Karen R. Zachow, Ph.D.

Registration No.  
(Attorney/Agent)

46,332

**(Complete if applicable)**

Telephone (858) 720-5191

Signature

Karen R. Zachow

Date

December 16, 2003